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cont.
shape of the external surface of an object to be cooled, rotor magnets that are part of the rotor fan and are positioned around a periphery of the rotor fan on the surface of the heat plate, and a stator coil substrate;

by having blades of the rotor fan each formed in a same gentle arc, and in the inner portion of an inner/outer two-step multi-blade form of the rotor fan, the blade being set at an angle to move the air through openings in the direction of rotational thrust toward an air intake, and outward from a central section, the blade which is set at the angle pushing the air in the radial direction of rotation, which is toward the outer periphery of the rotor fan, and the outer step that reaches beyond a raised central portion of the heat plate reaching down toward the object being cooled, in such a way that the outer step of the arced blades of the rotor fan is near to stacked heat radiation fins, the rotor fan with the two-step multi-blade form being shaped like an inverted saucer;

by having multiple thin metal heat radiation fins with excellent thermal conductivity arranged in parallel at fixed intervals above the heat plate outside the rotor fan as cooling heat-radiation fins;

and by combining the function of cooling heat sink with the heat radiation fins that conduct the heat absorbed from the heat plate and radiate it away by the action of the air moved by the rotor fan.

2. (Amended) A very thin fan motor with heat sink attached as described in claim 1 above, in which multiple heat radiation fins each having an opening large enough to accommodate with adequate turning room a rotor fan, are stacked on the heat plate, an air intake with a diameter smaller than the diameter of the rotor fan being placed over the center of the heat plate, and coils of a stator unit that is molded of a polymer together with a circuit board around a periphery of the air intake being located facing the heat plate, and the magnets of the rotor unit that includes the supported rotor fan being driven magnetically.

3. (Amended) A very thin fan motor with heat sink attached as described in claim 1 or 2 above, in which multiple heat radiation fins are stacked with a given interval between them and are connected by a heat conducting material or fittings, and in at least two diagonally

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cancel* opposed corners of the multiple heat radiation fins, a heat sink unit and the stator unit are fixed together in a simple assembly process.

4. (Amended) A very thin fan motor with heat sink attached as described in claim 1, in which there is a heat plate formed of a material with excellent thermal conductivity or a material that is partially diamond crystal, and the heat sink assembled on the heat plate is a stack of metal heat radiation fins made of copper or aluminum.

5. (Amended) A very thin fan motor with heat sink attached as described in claim 2, in which there is a heat plate formed of a material with excellent thermal conductivity or a material that is partially diamond crystal, and the heat sink assembled on the heat plate is a stack of metal heat radiation fins made of copper or aluminum.

6. (Amended) A very thin fan motor with heat sink attached as described in claim 3, in which there is a heat plate formed of a material with excellent thermal conductivity or a material that is partially diamond crystal, and the heat sink assembled on the heat plate is a stack of metal heat radiation fins made of copper or aluminum.

Please add new claim 7 as follows:

B2 --7. A very thin fan motor with heat sink attached as described in one of claims 4 through 6 above, wherein the material with excellent thermal conductivity is precious metal or copper.--

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the present application.

The Examiner's non-final Office Action dated January 3, 2002 has been received and its contents carefully noted. Claims 1-6 were pending in the present application. By this amendment, claims 1-6 have been amended and new claim 7 has been added. Accordingly, claims 1-7 are pending, of which claim 1 is independent.